

What is claimed is:

- 5                   1.     A money changer for automatic coin machines, comprising a casing in which a plurality of serially arranged tubes are mounted to store coins in a column shape, light barriers associated to the tubes at least in the upper and lower regions with each light barrier having a light-emitting element and a light sensitive receiving element which are superposed on the same side of the coin tube whereas the opposite side of the coin tube has arranged thereon a prism which reflects the received light back to the receiving element, and a control circuit for the money changer into which the output signals of the light receiving elements are entered, characterized in that the casing (44) has a wall portion (12) in parallel with the series of the coin tubes (54 to 60), a printed circuit board (14) for the control circuit is mounted on the opposite side on the wall portion (12) and carries the light-emitting elements (16) and receiving elements (18) which are directed towards the respective coin tube (56 to 60) via holes (20, 22) in the printed circuit board (14) and in the wall portion (12).

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- 25                   2.     The money changer for automatic coin machines, comprising a casing in which a plurality of serially arranged tubes are mounted to store coins in a column shape, light barriers associated to the tubes at least in the upper and lower regions with each light barrier having a light-emitting element and a light sensitive receiving element which are superposed on the same side of the coin tube whereas the opposite side of the coin tube has arranged thereon a prism which reflects the received light back to the receiving element, and a control circuit for the money changer into which the output signals of the light receiving elements are entered, characterized in that the coin tubes (54 to 60) are made of a light-transmissive material and the prisms (36) are integrally fanned with the respective coin tube.

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3. The money changer as claimed in claim 2, characterized in that inlet and outlet surface portions for the light beam of a coin tube (54 to 60) are defined by windows (28 to 30) in which the wall thickness of the coin tubes (54 to 60) is smaller.

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4. The money changer as claimed in claim 3, characterized in that the transmission to light is markedly higher in the region of the windows (28 to 30) than is in the other region.

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5. The money changer as claimed in claim 3, characterized in that said inlet and outlet surface portions or said windows (28, 30), at the outside of said coin tubes (54 to 60), are surrounded at least in part by a raised frame (32, 34) through which the light entering the coin tubes (54 to 60) and exiting therefrom is restricted from unwantedly propagating crosswise to the beam axis.

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6. The money changer as claimed in claim 2, characterized in that said prisms (36), at the outside of said coin tubes (54 to 60) are surrounded at least in part by a raised frame (42) which restricts the propagation of unwanted light and the penetration of unwanted extraneous light to the prisms (36).

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7. The money changer as claimed in claim 1, characterized in that said frames (32, 34) of the windows (28, 30) bear against the side of the wall portion (12) that faces them.

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8. The money changer as claimed in claim 1, characterized in that a cassette-shaped assembly of the coin tubes (54 to 60) has two cup components (66, 76) each of which has the cylinder halves (68, 78) of the coin tubes 54 to 60)

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9. The money changer as claimed in claim 8, characterized in that a cassette

assembly is enclosed by a cover (62), which is U-shaped in cross-section, from the front and the cover (62) can be joined to the cassette assembly by means of a snap connection to form a unit.

- 5                   10. The money changer as claimed in claim 9, characterized in that said cover (62) is also manufactured from a transparent plastic.
- 10                   11. The money changer as claimed in claim 9, characterized in that said casing (44), on the two sides of the wall portion (12), has vertically extending, parallel-spaced wall portions (46, 48) into which a receiving slot (50) open to the free edge of the wall portion (46, 48) is formed each and the cover (62), in its leg-like wall portions (92, 94) at the outside, has trunnion-shaped projections (104) which are adapted to be introduced into said receiving slot (50) when the unit is inserted into said casing (44).
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- 20                   13. The money changer as claimed in claim 1, characterized in that the wall portion (12) has formed thereto locating means by which the printed circuit board (14) is located to the wall portion (12).
- 25                   14. The money changer as claimed in claim 1, characterized in that the light and receiving elements (16, 18) are operated in a pulsed mode.